and financial arrangements, while encouraging expeditious implementation of service. $\frac{52}{}$

Ellipsat assumes that the Commission does not intend to exclude qualified applicants who have the present ability and intention to proceed or to mandate a particular market approach. In a new service, the Commission has allowed maximum flexibility for applicants to structure financial arrangements and to allow the financial community to decide which systems will best serve the market. This flexible approach encourages new entrants and fosters competition in the provision of satellite services, and allows participation of small businesses whose interests are of particular interest to Congress and to a succession of U.S. administrations. $\frac{53}{}$ Inequitable and unnecessarily strict financial standards will ultimately deny the benefits of competition to the public, including lower prices, a variety of

^{52/} It is well-established that "[a]ny financial eligibility requirement imposed upon license applicants must bear some reasonable relationship to true financial fitness." ARINC v. FCC, 928 F.2d at 447 (D.C. Cir. 1991). The FCC may not use financial requirements as an arbitrary device to winnow the applicant field or to "eradicate nonconformity under the pretext of assessing financial qualifications." Id. at 448.

See, e.q., 15 U.S.C. § 631(a) (the "Small Business Act") ("It is the declared policy of the Congress that the government should aid, counsel, assist and protect, insofar as possible, the interests of small-business concerns in order to preserve free competitive enterprise.")

service options, diverse service providers and more rapid introduction of service. $\frac{54}{}$

For these reasons, Ellipsat recommends that the Commission allow companies the opportunity to show financial ability based on a portion of the system that will provide commercial service; to rely, on future revenues, income and public offerings to finance system expansion, as permitted in other satellite proceedings; and/or to demonstrate compliance with a more stringent milestone schedule which will eliminate companies who are not able to proceed (<u>i.e.</u>, introduction of commercial service within four years of licensing.)

3. Equitable Application of the Domsat Standard Required Committed Funds

If the Commission intends to adopt the strict domsat standard (without tailoring it to the particular context), then equity requires the test to be applied fairly to existing large companies (with other lines of business) and new entrants, often small businesses. Under the domsat standard, such companies may rely merely upon submission of a balance sheet or financial statement, even though there is no assurance that corporate funds

The Commission has enumerated the benefits of competition to consumers in numerous satellite proceedings. See, e.g. Second Report and Order, 60 R.R. 2d 298, 304, 306 (1986).

will be devoted to the project. $\frac{55}{}$ In contrast, other companies must provide evidence of fully negotiated loans and commitments.

Submission of a balance sheet or financial statement does not, by itself, provide assurance that the company or its parent has the intention to proceed or will actually proceed with the satellite project. $\frac{56}{}$ Corporate management retains the unfettered ability to decide whether to undertake or abandon the project at any time if a more lucrative business opportunity appears, a flexibility denied to new entrants. Moreover, there is no way to force the company to proceed should it conclude that its system is not a good business proposition.

The Commission's balance sheet test thus is essentially a "paper showing." Reflecting this lack of probative value, the Commission's satellite history contains many examples of large, established companies (with impressive balance sheets) who did

However, in the recent <u>TRW</u> decision, a suggestion is made that "committed" funds may be required. In addition, where a parent company is providing financing, such a commitment is required. <u>See Satellite Communications</u>, 104 F.C.C. 2d at 644 ("If the applicant is owned by more than one corporate parent, it must submit evidence of commitment to the proposed satellite program by management of the corporate parent upon whom it is relying.")

<u>56</u>/ <u>See</u> Declaration of Ellipsat's financial expert Davinder Sethi and Letter from Barclays de Zoete Wedd, Exhibit A.

not ultimately proceed with construction of licensed satellite systems. $\frac{57}{}$

The balance sheet test is particularly inappropriate here and may invite balance sheet "tricks." Given the complexity of financing these systems, the applicants will have to develop ownership structures that permit and facilitate investment. At least two companies, Motorola and Loral, have already restructured and it is not entirely clear what role the FCC applicant (and its parent company or companies) will have in funding the project. As a result, the applicant's balance sheet may not be relevant to project funding, without a separate, explicit and binding commitment by the entity that will be responsible for system financing. The Commission will inevitably and inappropriately be drawn into review and assessment of balance sheets and questions of corporate structure.

Nonetheless, if the Commission decides to accept balance sheets as evidence of financial ability, fairness requires that the Commission require: (1) existing companies to submit proof

^{57/} It is noteworthy that many of the domsat applicants who, in 1985, advocated a strict financial test, including Federal Express and Martin Marietta, never proceeded with satellite construction.

Questions have been previously raised in this proceeding as to the actual relationship between the applicant, Motorola Satellite Communications, Inc., and Iridium (in which Motorola has a minority interest). Loral Qualcomm has established a new entity GLOBALSTAR, L.P. to own the proposed LEO satellite system, in order to channel domestic and foreign limited partner investments. See April 21, 1994 Amendment to Globalstar System Application.

that the necessary funds are committed with the same degree of irrevocability required for new entrants; or (2) treat new entrants and existing companies equitably by allowing new entrants to make a financial showing based on the assets of other equity participants and strategic partners in the venture. New entrants should also be permitted to base a financial showing on proposed revenues and future public offerings as discussed above. $\frac{59}{}$

ELLIPSAT GENERALLY SUPPORTS THE PROPOSED SERVICE RULES

A. Regulatory Treatment

In the Notice, the Commission tentatively decides that MSS Above 1 GHz service may be offered as a commercial mobile radio service (CMRS), and invites comment on whether satellite licensees should be required to operate as common carriers. $\frac{60}{}$ For reasons discussed below, Ellipsat believes that common carrier treatment of satellite licensees is not necessary.

Congress clearly intended, in its 1993 amendments to the Communications Act, to preserve the FCC's discretion to regulate space segment operators as non-common carriers to the extent that they do not provide service directly to the public. Ellipsat

⁵⁹/ See discussion, supra, at pp. 38-41.

⁶⁰/ Notice at ¶ 80.

strongly endorses this approach as consistent with statutory requirements and prior FCC precedent. There will be adequate capacity available, and multiple competing systems, to ensure availability of service and access without imposing common carrier requirements upon satellite licensees. In light of this competitive environment, there is no need to mandate common carrier obligations. $\frac{61}{}$

Imposition of common carrier regulation on service providers, <u>i.e.</u>, companies that are reselling satellite-based services, may be appropriate depending upon how the service will be offered. However, common carrier treatment of the satellite licensee is unnecessary and will potentially inhibit investment in and implementation of the systems. It is important to allow for flexibility in the development of this service. Substantial investment will almost certainly be necessary to finance the systems, for example, and will be important and appropriate because of the global nature of the LEO systems. In fact, coordination and licensing in other countries may well be facilitated by broad equity participation in the financing of the LEO systems. 62/

^{61/} This assumes a competitive environment of up to five systems. If only one system should be implemented, the Commission may need to revisit this issue.

<u>See</u> Satellite Personal Communications and their Consequences for European Telecommunications, Trade and Industry, Report to the European Commission by KPMG Peat Marwick, March 1994.

B. License Term and System Upgrades

Ellipsat generally supports the proposed treatment of license terms and renewals. However, satellite modification standards should be tailored to the shorter satellite lifetimes and the likelihood of system upgrades within the license term.

Ellipsat projects a satellite life of 5-7 years and anticipates that advances in technology will be incorporated within the 10-year license term. Licensees should therefore be provided with greater flexibility to construct replacement satellites that incorporate technological advances during the license term. As first-generation systems, there will be system refinements that will be incorporated in replacement satellites.

Modifications of replacement satellites should therefore be considered minor modifications (not subject to public notice or competing applications) as long as the licensee certifies that no new interference will be created and the baseline coordination criteria are met.

Licenses must be issued for a minimum of ten years to justify the huge costs involved in developing the space segment and the ground segment infrastructure. The Commission should also provide a system renewal expectancy to licensees, in light of the large expenditures involved in these systems and the burdens of international coordination and licensing.

C. <u>Implementation Milestones</u>

Ellipsat agrees with the Commission as to the importance of milestone schedules. These milestones should, however, be designed to ensure progress in system implementation and should not impose inequitable burdens on particular systems.

Licensees should not be required to start construction of all satellites within three years as now proposed. This milestone is inconsistent with the six-year system completion milestone and could require unnecessary expenditures.

For example, Ellipsat expects that a cluster of ELLIPSOt satellites will be built and launched within 24-36 months. ELLIPSOt satellites may be constructed in different phases, consistent with the six-year completion requirement, to take advantage of technological advances and to respond to market demand. The Commission should not limit the flexibility to commence construction of additional satellite in stages as long as service is initiated within the specified milestones.

Ellipsat has suggested imposition of stricter progress milestones in lieu of financial showings $\frac{63}{}$. In this regard, Ellipsat recommends that all licensees be required to introduce commercial service within four years. This milestone requirement is more closely related to actual service than construction starts which can be documented merely by submission of a

⁶³/ See discussion at 39-40, supra.

contract. A requirement of service, within four years of licensing, would achieve the Commission's objective of expeditious system implementation and would be a straightforward, definable milestone.

VI. CONCLUSION

Ellipsat urges the Commission to act expeditiously in adopting rules and policies for the MSS Above 1 GHz service in accordance with the views set forth herein.

Respectfully submitted,

ELLIPSAT CORPORATION

By:

Jill Abeshouse Stern Jane M. Sullivan

SHAW, PITTMAN, POTTS & TROWBRIDGE 2300 N Street, N.W. Washington, D.C. 20037 (202) 663-8000

Its Attorneys

May 5, 1994

Exhibit A



BARCLAYS de ZOETE WEDD LIMITED

Corporate Finance

Ebbgate House 2 Swan Lane London EC4R 3TS Telephone 071 623 2323 Fax 071 956 4662/3/4

May 3, 1994

Mr William A Caton Secretary Federal Communications Commission 1919 M Street, NW Washington, DC 20554

> Re: Notice of Proposed Rulemaking CC Docket No 92-166

Dear Mr Caton

We are aware of the complexities and challenges facing the FCC's proactive stand on the authorisation of new and innovative global telecommunications services and your efforts to license low-earth orbiting satellite systems. As you establish the rules and policies for the Big LEOs, we would like to present our perspective on the proposed financial qualification standards and hope that these views will be of assistance.

Barclays is one of the world's largest diversified banking and financial services group with representation in over 70 countries. Barclays de Zoete Wedd (BZW) is the investment banking arm of the Barclays Group. BZW acts as financial advisor to Mobile Communication Holding, Inc (MCHI), the holding company for Ellipsat Corporation. BZW has assisted MCHI in developing a business plan and more importantly on advising MCHI on the identification and selection of strategic, technical and financial partners from around the globe.

Based on our experience, the financial standards proposed in the FCC's February 18, 1994 Notice of Proposed Rulemaking do not reflect the rigor of responsive decision-making with respect to financial allocations or commitments for this type of project. Nor do the proposed standards recognise that the true determinant of success is in the marketplace, ie that the market will make judgement on the basis of the strength of the underlying business plan. To elaborate:

 Financial commitments are made periodically after continual assessments of the progress of the project. Corporate sponsors are obliged to do this in response to competing demands on their resources and their obligation to make allocations that best serve their shareholders.

BZW - the investment banking ann of the Barclays Group
Registered number 181866 Registered office as above
Member of SEA



- The above is particularly true for new and emerging technologies, such
 as Big LEOs, where there is little historical evidence of manifest
 demand and where technical challenges will emerge as the program
 develops and reaches its operational phase.
- Corporates and the capital markets will commit funds at various stages
 during the project's development, in different forms, once again based
 on the continual assessment of the project's milestones and as its risk
 profile changes over the build phase. We believe the market place
 recognises the sustainable advantages unique to an applicant, such as
 technology deployed, marketing strategy, and feature-price advantage,
 and best determines the survivors and the also-rans.
- Ellipsat's business plan and system design offers unique advantages.
 Its flexibility and progressive deployment strategy significantly improves the timing of the financial exposure of corporate sponsors and financial investors. This enhances Ellipsat's ability to implement the proposed system.
- We should also note that the strength of the balance sheet of a company, in this case based on the company's other lines of business, should not be construed as evidence of financial viability of the company's Big LEO venture unless the necessary funds are irrevocably committed.

Yours sincerely,

Trevor Nash Director

DECLARATION OF DAVINDER SETHI

- I, Davinder Sethi, hereby declare as follows:
- 1. This declaration is being submitted for association with the comments of Ellipsat Corporation with respect to the Notice of Proposed Rulemaking in CC Docket No. 92-166 ("Notice") proposing licensing and service rules for the Mobile Satellite Service Above 1 GHz. This declaration provides my expert opinion, with respect to the proposed financial qualifications standards for MSS Above 1 GHz licensees, and is based upon my review of the Notice and proposed Rule 25.143(b)(3) which specifies the proposed financial qualification requirements for space station authorizations in this satellite service.
- 2. I am currently employed as Senior Advisor to Barclays de Zoete Wedd Ltd. in the United Kingdom, the investment banking arm of the Barclays Group. Barclays is one of the world's preeminent investment banking institutions and a leader in advising and financing information technology companies around the world.
- 3. I have more than fifteen years experience in the fields of information technology and finance. My background spans academia, research, business and investment banking. For the

past five years, I have served in the field of investment banking, first as a director of Barclays de Zoete Wedd and now as a senior advisor to headquarters. In these capacities, my responsibilities include advising major global providers of information technologies and assisting these companies to develop and execute corporate development opportunities.

- 4. Prior to joining Barclays, I held positions at Bell Laboratories in communications research and at AT&T headquarters in corporate finance. My educational background includes a Ph.D. from the University of California at Berkeley in Operations Research, Economics and Statistics.
- 5. I am a financial advisor to Mobile Communications
 Holdings, Inc. (MCHI), the parent company of Ellipsat
 Corporation. In that capacity, I am assisting, and have
 assisted, the company with development of its business plan,
 financing and formation of strategic partnerships for the ELLIPSO
 system.
- 6. Based on my extensive experience in financing high technology ventures, and my knowledge of business and strategic plans for the ELLIPSO system, it is my expert opinion that there exists the ability and intention to proceed with implementation of the ELLIPSO system and that the marketplace will provide the necessary financing to meet construction, launch and first year

operating costs by recognizing the investment value of ELLIPSO™'s business plans.

7. After reviewing the Notice and the proposed financial standards, it is my expert opinion that (1) the proposed financial standard does not accommodate differences in the market and business strategies of the various LEO systems; (2) the standard does not reflect the unique characteristics of the Big LEO service and the complexity of the related financing issues; and (3) the standard could discriminate against new entrants, thereby discouraging beneficial competition. Each of these points is discussed below.

The Proposed Financial Standard Does Not Accommodate Legitimate Variations in Market Approach

- 8. The proposed financial standard does not accommodate legitimate variations between systems in terms of market approach and strategy. Each of the Big LEO systems has proposed a different market approach and concept. In a new and commercially unproven service, it is my opinion that the ELLIPSO system offers unique advantages because of its flexibility and progressive deployment strategy.
- 9. ELLIPSO's market strategy and technical design do not require full system funding or implementation on "Day One."

 ELLIPSO allows a commercially valuable and unique option to offer

a commercial service through partial deployment. This early entry system will generate revenues, facilitating system expansion and providing a basis for later debt and equity offerings. The Commission's financial test does not appear to recognize this innovative market vision, and, indeed, penalizes this potentially cost-effective and efficient approach to service introduction.

strategy, indeed, the <u>only</u> sensible strategy from a market and financial standpoint in a new and commercially unproven service. This approach fully comports with market realities and is designed to develop the market for LEO services as a basis for system expansion. The Commission's proposed financial standard may in fact artificially encourage development of systems that are not market-based, resulting in costly failures or abandonment by the developers.

The Proposed Standard Does Not Reflect the Unique Characteristics of the Big LEO Service

11. A strict financial test is, in my view, unsuitable for an emerging technology such as the Big LEOs. Although promising, the Big LEOs are, as yet, unproven in the marketplace. The proposed systems will be extremely expensive to develop, with projections ranging from \$700 million to over \$3 billion.

12. Proposed Rule 25.143 does not comport with the financial realities of financing a global satellite system of this magnitude. Traditional bank loans are not likely to be the primary source of initial funding. All of the systems will need to rely initially upon funding by strategic partners, as a basis for second-stage bank loans or public offerings. It is wholly unrealistic to expect any of these investors to commit hundreds of millions of dollars on a non-contingent basis at the outset. Any reasonable investor expects to retain the ability to assess a project at critical milestones in order to consider relevant market and financial developments.

The Proposed Standard is Inequitable and Unrealistic

13. Perhaps most importantly, the proposed standard will, in my view, discriminate unfairly between companies with other lines of business (often with no relation to the proposed satellite venture) and new entrants. Companies with other business activities are permitted to rely on current assets and operating income (from those activities) to satisfy financial requirements, without any demonstration that the assets or income will actually be dedicated or committed to the satellite project. A large company with ongoing lines of business, wholly unrelated to the proposed satellite system, can therefore submit a balance sheet reflecting credit and cash reserves without any intention

or ability whatsoever to apply those assets to the satellite project. Nor could the company be forced to do so if the project is judged at some point downstream to be uneconomic.

- 14. There is no rationale for concluding, on the basis of an unrelated balance sheet or financial statement, that a company will proceed with satellite system implementation. Indeed, satellite history offers several examples, at least, of large companies that failed to commit the necessary resources to go forward with or sustain a satellite project (e.g., SBS). In this regard, the subsidiary of an existing company is no different than a "start-up" or entrepreneurial venture, and should be similarly required to demonstrate committed funds.
- 15. Under the proposed standard, new entrants must provide evidence of fully negotiated loans or commitments. This is a far more onerous standard than will be imposed on companies with other lines of business. Outside investors, like company management, must have the flexibility to evaluate market conditions periodically. To be equitable, the Commission would need to require applicants relying on current assets and income to demonstrate that funds reflected on the balance sheet or financial statement are irrevocably committed to the project. This non-contingent standard would be the equivalent of the showing that is imposed on new entrants (and is proposed to indicate the artificial nature of the standard in both cases.)

16. If the Commission decides to allow applicants to rely upon current assets and operating income, it should clarify that new entrants will be permitted to rely upon the current assets and operating income of their investors and strategic partners to demonstrate financial qualifications.

Conclusion

17. In my expert opinion, it is far more appropriate for the market and investment community to make financial determinations on the basis of the operator's credit-worthiness and business plan, than for a government agency to do so on the basis of artificial paper showings which have little bearing on actual intention to proceed. The Commission should err on the side of allowing companies to move forward with system implementation and avoid imposition of unrealistic and inequitable financial requirements that may penalize particular market strategies. Any financial standards adopted by the Commission should provide maximum flexibility for the emergence and development of diverse, competing systems in this new satellite service.

The foregoing is true and correct to the best of my knowledge and belief.

May 4, 1994

Respectfully submitted,

Davinder Sethi

Dated:

A-8

Exhibit B

KEY EMPLOYEES

DR. DAVID CASTIEL PRESIDENT AND CEO

Dr. David Castiel is President and Chief Executive Officer of MCHI, the parent company of Ellipsat Corporation and Ellipsat International, Inc. which are implementing the ELLIPSO™ satellite system. ELLIPSO™, conceived by Dr. Castiel, is an elliptical low earth orbit satellite communications system that will provide satellite-based position location and cellular services to mobile vehicles and other users at a cost comparable to terrestrial services. ELLIPSO™ was the first of the "large" LEO systems to be developed as a concrete proposal for licensing by the Federal Communications Commission in the United States of America.

Before his involvement with the ELLIPSOM project, Dr. Castiel was Vice President of Marketing and Business Development at American Mobile Satellite Corporation (AMSC) where he oversaw the development of AMSC's business strategy. Prior to AMSC, Dr. Castiel was Director of Marketing for Satellite Communications Products at Hughes Network Systems, a subsidiary of Hughes Aircraft Corporation, where he oversaw the development of the Mobile Satellite Services strategy. At HNS, he also held the position of Director of Business Planning for the Packet Networks Group. Dr. Castiel also held senior telecommunications positions at Booz, Allen and Hamilton and General Electric Information Services Company.

Dr. Castiel was a post-doctoral research fellow a the University of California at Irvine where he conducted research in Surface Solid State Physics. He received his Doctorate in Theoretical Solid State Physics, with High Distinction, and his graduate business degree from the University of Paris, France. He attended McGill University for a MS program in Solid State Physics and received his BS in Physics from the University of Montreal. He has published numerous scientific, technical and business papers, and is a regular speaker at various industry events. He was nominated to the Via Satellite Top 100 Executives for 1991.

Dr. Castiel is also fluent in French and Spanish.

NEEL HOWARD, JR. EXECUTIVE VICE PRESIDENT, CORPORATE DEVELOPMENT

Neel Howard is currently Executive Vice President of Corporate Development for MCHI Corporation. He has been a Director, Chief Executive Officer and founder of ITR Group, Inc., a merger/acquisition firm specializing in investments in the communications industry. Mr. Howard served in that capacity from February 1988 to June 1991, when he joined Ellipsat Corporation to organize and execute a corporate development plan.

Mr. Howard has been a Director, Vice Chairman and co-founder of Data America Corporation, a nationwide data network and information services company, since its organization in February, 1987. Mr. Howard has been founder and Chairman of the Board of Advanced Communications Design, Inc., a company concentrating in facilities management and systems integration in the telecommunications industry. He was founder and Chief Executive Officer of Citifone, Inc., a communications company involved in marketing cellular telephone services and developing cellular telephone hardware. Mr. Howard has served as an account executive and senior management in the securities brokerage industry from 1968 to 1983.

Mr. Howard is a Certified Financial Analyst, and was also an instructor of corporate and investment finance at Tulane University. He has a B.B.A. and an M.B.A. from Tulane University.

GERALD B. HELMAN VICE PRESIDENT FOR POLICY AND INTERNATIONAL PROGRAMS

Ambassador Helman, retired from the United States Foreign Service in 1991, is Vice President for Policy and International Programs for Mobile Communications Holdings, Inc. He is also a member of the Boards of Starsys and the International Small Satellite Organization and a consultant to the US Institute for Peace, the Department of the State and Booz, Allen and Hamilton.